

REMARKS

Summary of Changes Made

The Application was filed with 9 (nine) claims. A preliminary amendment left the subject matter and number of claims unchanged. Presently, Applicants elect without traverse the claims of Group I (claims 1-7 and 9), and claim 8 is hereby canceled as drawn to a non-elected invention. Claims 4 - 6 have been canceled, claim 1 is amended, and new claims 10-12 are added herein. Accordingly, claims 1-3, 7 and 9-12 (8 claims) remain pending in the application. No new matter is added hereby.

Claim Rejections - 35 U.S.C. § 112 second paragraph

Claims 1-7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claim 1 refers to a side where the information code is observed, however, the code observance lacks antecedent basis, further the spatial relationship of the high and low reflectance portions and the transparent material as well as the reflection reduction layer is not positively recited. Similar rationale applies to claims 2-3 and 9. Claim 6 recites "a surface of the article where the laminated member is attached", also lacks antecedent basis. Claim 9 is further unclear as to if the code is on the article or the laminated member.

Initially, the Examiner will note that claims 4-6 have been cancelled, thus rendering their rejections moot. The Examiner will also note that claim 1 has been extensively amended. Spatial relationships have been clarified by the recitation that the transparent material layer has an incident light side and a non-incident light side opposite the incident light side. Further, the relationships and shapes of the high- and low-reflectance portions have been clarified by the recitation that the high-reflectance portions are indented portions of the incident light side of the transparent material layer and the low-reflectance portions are flat, non-indented portions of the incident light side of the transparent material layer. The "code observance" noted by the Examiner has been deleted from the claim in favor of the clearer, added language.

Claim 2 has been amended to clearly recite that the hologram layer is between the transparent material layer and the reflection-reduction layer. Claim 3 has been amended to recite that the retroreflection layer is between the transparent material layer and the reflection-reduction layer. Claim 9 has been amended to eliminate the "information code" language, in favor of

clearer structural language, that being,

“An article comprising the laminated member of claim 1, and a substrate, wherein the laminated member is attached to the substrate.” It is thus believed that the indefiniteness rejections under section 112 have been overcome; Applicant respectfully requests their withdrawal.

Claim Rejections - 35 U.S.C. § 102 – (Kimura)

Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,000,804 to Kimura. Kimura teaches a retroreflective laminate (laminated member) where a resin layer **214**, comprises a transparent microsphere **216** with incident light **218** transmitted through the microsphere and resin layer and patterned interference layer **222** of titania coated mica shown in detail in layer **22** of FIG. 2, titania **26** and mica **24** which reflected light **228** reflects from surfaces on **222** and reflective layer **212** (high-reflectance portions). The high and low reflectance portions of Kimura creates an optical path difference of reflected lights **20a** and **20b** showing low-reflectance portions of light **30**, which is reflected from the reflective substrate at an increased rate. Kimura also discloses a hologram image (hologram layer **60**), which is laminated with the retroreflective material for recording waves used in packages and notes used as money. FIG. 4 allegedly shows these layers made of a transparent material, using the same materials as Applicant. The Examiner concludes that such meets the properties of light travel or reflectance as recited per instant claims 1-6. Because the microspheres are round and embedded in the transparent resin material's upper surface, the surface of the resin layer is inherently indented, and spaces around it are nonindented. Further, the Examiner notes that the intended use of the information code does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations, which the Examiner alleges is disclosed in Kimura. The Examiner notes that Applicant argues the features of claims 1 and 8 essentially perform a function opposite to that in Kimura: reducing reflected light in instant claims 1 and 8 as opposed to “emphasizing” reflected light in Kimura, however contends that the claims are not particular to the function or performance of the articles and that Applicant has not provided a convincing argument because the same materials are present in the prior art that are recited in the instant claims and thus must function in the same manner.

As noted previously, claims 4-6 have been cancelled and claim 1 has been amended. The limitations of claims 4 and 5 have been imported into claim 1. The Examiner alleges that Kimura teaches a retroreflective laminate (laminated member) where a resin layer **214** comprises a transparent microsphere **216** with incident light **218** transmitting through the microsphere and resin layer (thus transparent material) and patterned interference layer **222** of titania coated mica. Further, the presently claimed invention differs from Kimura owing to the amendments to claim 1, in particular, the recitation that “the low-reflectance portions are **flat**, non-indented portions of the **incident light side** of the transparent material layer, (emphasis supplied).” The prior art of Kimura utterly fails to disclose or suggest that the low reflectance non-indented portions of the transparent material layer are flat, and located on the incident light side of such layer. Indeed, the Examiner’s citation on this matter is that Kimura discloses that the indented and non indented portions are produced by regularly spaced microspheres. Hence, the non-indented portions will not be flat. Further, the microspheres cannot be used to encode information as in the presently claimed invention, because there is no way to pattern the microspheres of Kimura to correspond with an information code. On this basis alone, Applicants respectfully submit that claim 1 is patentable over Kimura, and request withdrawal of the rejection of claim 1, and all claims hereunder depending from claim 1, namely 2, 3, 7, and 9.

New claim 10 ultimately depends from claim 1, and is patentable for the same reasons. Claim 11 recites a laminated member including five layers, a transparent material layer, a hologram layer, a reflection-reduction layer, a retroreflection layer, and an interference layer. Claim 12 recites a laminated member including five layers, a transparent material layer, a reflection-reduction layer, a retroreflection layer, and an interference layer. Kimura fails to disclose transparent members having all of the aforementioned five or four layers, respectively. Accordingly, Applicants assert that new claims 10-12 are all patentable (novel) over Kimura.

Claim Rejections - 35 U.S.C. § 102 – (Olsen)

Claims 1, 3-4, 6-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,612,119 to Olsen et al. Olsen teaches a retroreflective transfer where reflective aluminum portions **4** patterned on a retroreflective glass microsphere layer **3** are embedded in a transparent resin material **6** having indented portions (from the microspheres) of claim 4 and non-indented

portions (the flat surface of 6) having paper 1 (opaque and thus functions as reflection-reducing layer) and an extender elastomer (adhesive) layer 7 shown in the Figure for adhering to textile (an article) via transfer by heat press. The Examiner states that the intended use of a device lends no patentable weight and concludes that the subject matter of claims 1, 3, 4, 6, 7, and 9 are met.

The Examiner will note that the limitations of claims 4 and 5 have been added to claim 1 by amendment, and claim 4 has been canceled. Because claim 5 was not rejected hereunder, Applicants assert that claim 1, and all claims that depend therefrom, are novel over Olsen. Claim 6 has also been canceled herein, thus rendering its rejection moot.

Applicants note that the present invention discloses that “an information code is engraved as a distributed pattern of flat portions 18 (low-reflectance portions) and indented portions 16 (high-reflectance portions) formed almost as hemispheres at a surface of the transparent material layer 12”. The Examiner contends that “Olsen teaches a retroreflective transfer where reflective aluminum portions 4 patterned on a retroreflective glass microsphere layer 3 are embedded in a transparent resin material 6 having indented portions (from the microspheres) of claim 4 and non-indented portions (see flat surface of 6) having paper 1 (opaque; functioning as reflection-reducing layer) and an extender elastomer (adhesive) layer 7 shown in the Figure for adhering to textile (an article) via transfer by heat press.”

However, the reflection-reducing layer is not the same as paper. This invention shows that a reading experiment was performed with color paper being used as the substrate as shown in Table 1. Satisfactory results were not obtained using every color paper. Hence, the Applicants, through diligent studies, discovered the reflection-reducing layer to overcome this problem. Applicants dispute the contention that that paper is equivalent to the reflection-reducing layer.

Based on the foregoing, Applicants respectfully request withdrawal of the rejection of claims 1, 3, 4, 7, and 9.

New claim 10 ultimately depends from claim 1, and new claims 11-12 contain all of the limitations of claim 1, as amended. Hence, claims 10-12 are novel and patentable over Olsen.

Based on the foregoing, Applicants respectfully request withdrawal of the rejection of claims

Claim Rejections - 35 U.S.C. § 103(Olsen/Kuntz)

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olsen in view of U.S. 6,641,874 to Kuntz et al (“Kuntz”). The Examiner contends that Olsen essentially teaches the claimed invention, and admits that Olsen fails to explicitly recite a hologram or pearl pigment as per claims 2 and 5. Accordingly, the Examiner contends that Kuntz teaches multilayer reflective films employing holograms and pearl or titania coated mica flake pigments to have light reflecting in higher and lower regions thereby forming holographic images in reflective layers used for information or patterns on paper documents, clothes or woven fabrics. The Examiner concludes that it would have been obvious to have modified the laminated member of Olsen to include hologram and pearl pigments as claimed because Kuntz teaches the advantages of low and high reflectance regions forming holographic images used for information or patterns.

The Examiner will note that claim 5 has been canceled, thus rendering the rejection thereof moot. Because the subject matter of claims 4 and 5 has been incorporated into claim 1, and claim 4 was not rejected hereunder, and claim 2 depends from claim 1, Applicants respectfully submit that claim 2 is patentable over the cited combination of Olsen and Kuntz, and request withdrawal of the rejection.

Included herewith is a Disclosure Statement citing a Search Report and the references noted in the Report for a corresponding European application. The Report was issued very recently on July 9, 2008.

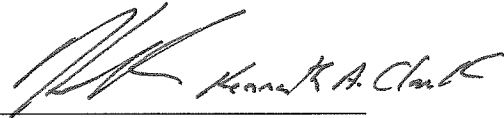
CONCLUSION

Based on the foregoing, the Applicants respectfully request entry of the instant amendment and a Notice of Allowability for claims 1-3, 7 and 9-12. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application. If there are any additional fees resulting from this communication, please charge the same to our Deposit Account No. 18-0160, our Order No. IWI-16110.

Respectfully submitted,

RANKIN, HILL & CLARK LLP

By

A handwritten signature in black ink, appearing to read "Kenneth A. Clark", is written over a horizontal line.

Kenneth A. Clark Reg. No. 32,119

Christopher J. Korff Reg. No. 55,342

700 Huntington Building
925 Euclid Avenue
Cleveland, Ohio 44115-1405
(216) 566-9700